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Ascendance-Submission as Related to Speed of Visual Recognition of Tachistiscopically Presented "Ascendant" And "Submissive" Words

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"ASCENDANCE-SUBMISSION" AS RELATED TO SPEED OF VISUAL RECOGNITION OF TACHISTISCOPICALLY PRESENTED "ASCENDANT" AND "SUBMISSIVE" WORDS

by

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LIFE

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CHAPTER I

INTRODUCTION

The study of perception during recent times has been developing along two distinct lines. One of these approaches is traditional in that it deals with perception per se, while the other more recent direction is concerned with the effect of certain personality variables on perceptual acts. In the former case, interest has been focused on the various psychophysiological aspects of perception and how these are affected by learning and the various physical motivational states, as when the effect of hunger on the perception of food objects is studied (9). In the latter case, however, there is an interest in discovering the manner in which certain directive factors such as interests, emotional states, personal values, motives, and drives colour individual perceptual responses. An example of this approach would be the attempt to determine the importance of personal values in the speed of recognition of words associated with particular values (8). Many studies which approach perception from this latter point of view have been reported in the literature, and it has been generally concluded that if we are to get a true and accurate concept of human perception, we must take into account

the attitudes, prejudices, and personal traits of the perceiver as he reacts to the stimulus material presented to him.

Thus, the assumption underlying the present study is that the personality traits of "ascendance" and "submission" are relatively constant directive factors having their loci in the personality structure, and that they are continuously affecting perception. This assumption gains increasing validity the more we concern ourselves with extremely "ascendant" and "submissive" individuals. It is expected that these persons will react consistently with respect to either of these two traits in a given situation (2).

Perhaps a word might be said with respect to an explanation of the traits of "ascendance" and "submission." Allport states that in most social situations comprising only two persons, there is, psychologically speaking, a dominant personality and a submissive personality (2). The dominant, or ascendant person will tend to lead the direction of the activity, and the submissive person will tend to follow. It should be recognized, however, that regardless of the degree to which a person is ascendant or submissive, he will in some situations show evidence of the opposite trait normally associated with him. Therefore, when we consider the average individual with respect to these traits we may expect that his reactions to different social situations will tend to cancel each other regarding the two traits

under consideration. In some situations he will act ascendantly, while in others his reaction will be submissive.

This investigation is based upon the hypothesis that the traits of "ascendance" and "submission" can be directly related to the speed of visual recognition of words bearing "ascendant" and "submissive" connotations. It is expected that persons making high "ascendant" scores on a standardized test for ascendance-submission will tend to recognize words which are of an "ascendant" connotation more quickly than they would words which suggest "submissive" qualities. The opposite is expected of those making a high "submissive" score. According to the hypothesis, these individuals should recognize words which imply "submissive" qualities more quickly, and be less prone to react to the "ascendant" words.

CHAPTER II

REVIEW OF RELATED LITERATURE

Upon examining the literature related to this study, no reports were found which dealt directly with the hypothesis under consideration here. Therefore, it was thought advisable to report on (1) studies concerning the reliability and validity of Allport's "A-S Reaction Study," (2) on studies which relate to the various applications of the test, and (3) on studies which use the same or similar experimental design, but which differ as to purpose and/or materials used.

(1) Reliability and Validity

In 1928, Allport (2) published the results of his reliability and validity investigations concerning his "A-S Reaction Study." The reliability coefficient for the form for men was obtained by correlating the odd-numbered pages of the test booklet with the even numbered pages. In this way, the r obtained was .582. When corrected by the Spearman Brown Accuracy Formula, this figure was raised to .737. Thus, it would appear that the test has but a fair reliability.

The validity was obtained through the use of several different groups. The first group consisted of 100 male college

students, selected at random. The scores on the Reaction Study were correlated with self-ratings, with an r of .586 resulting. In a second group of 381 college men, this same validation technique yielded and r of .625. A third group of male students were rated with regard to the two traits by their associates. In this case, the r was .459. The N in this third group is not specified.

M. E. Broom (10) conducted a reliability and validation study on Allport's test with results tending to coincide with Allport's findings. A reliability coefficient of .714 was obtained for 68 cases using the test-retest method.

Validation was checked by correlating the A-S test scores with self-ratings and with the ratings of associates in a college population. This procedure was followed twice at a one month interval, and the results indicate for the first half of the study, an r of .460 and .410 between A-S test scores and self-ratings and ratings by associates respectively. The r between the first test score and the second self-rating was found to be .424. For the first test score and the second rating by associates, it was .446. In the second half of the study, the r between the second A-S test score and the first self-ratings and ratings by associates was .483, and .423 respectively. Second self-ratings and second ratings by associates with second test scores were .442, and .481. It can be seen that the validity

coefficients are not outstanding.

Hanna (13), working with over 50 introductory college students, found an r of .78 using the test-retest method over a period of one year.

The consensus among investigators seems to be that the reliability and validity of this test is not high enough to warrant its serious consideration as a tool for measuring the traits of ascendance and submission in individuals. Ratings are considered poor criteria in almost all validation procedures, and should be employed only when other standards of validity are not available. In the case of Allport's test, there was no measure of validity other than ratings, with a few scattered exceptions. For example, a study by Bender (7) revealed a correlation of .379 between the A-S test and the Heidbreder test of introversion-extroversion. This correlation is even lower than the ones obtained with the use of a second test as a validation criterion is of dubious merit, especially when the external validation criterion for the second test can be called into question.

Aware of the limitations of the A-S test with respect to reliability and validity, Wang (25) attempted to determine its internal consistency, or more precisely, to determine the extent to which the separate items of the test are diagnostic of the traits of ascendance and submission. The A-S test was given to 100 male students, and the response which each subject made to

every question was tabulated. This group of 100 was then broken down into sub groups of twenty, and the frequencies of ascendant and submissive replies was noted for all five of the sub groups, from the most ascendant to the most submissive. Of the 41 items in this edition of the test, only thirty were found to be consistent with the score made by the total group of subjects.

To verify this result, a second group of 100 students was given the test and the same procedure was followed. The result showed the same thirty items to be diagnostic of the two traits. The correlation between the total score on the test and the score for the thirty diagnostic questions was found to be .97, while the correlation between the eleven non-differentiating items and the total test score was found to be .59. It was concluded that these eleven items should be either reevaluated, or dropped from the test completely.

(2) Application and Uses

The Allport "A-S Reaction Study" seems to have had extensive applications among personnel managers as a device for detecting sales and executive ability. Beckman (8) was the first to realize this possibility, and proceeded to make certain revisions which would be consistent with administrating it to industrial groups. Most of these revisions took the form of rewording certain questions, since the original test was standardized on a college population and questions are voiced in an

academic frame of reference.

Beckman used only those items found by Wang to be of diagnostic value, thus limiting his revision to twenty-seven questions. This form of the test was given to a large group of managers and applicants for a student manager position in a large chain store, to a wholesale sales group, and to various executives and technicians. A group of fifty Northwestern University students was also used. The tentative norms for 350 cases showed a mean score of 1.4 on this form, and a median of 1.0. The total range was from -51 to 49. These results are consistent with those obtained by Allport on his original standardization group. This group consisted of 727 men. The mean and median scores were -0.35 and 0.00 respectively. The total range was from 64 to -55.

On the basis of Beckman's study (8), it was found that the store managers had the highest median and mean. Of all the store managers leaving the concern in the course of a year, only one-fourth had made a positive score on the revised test. Men with submissive scores succeeded less often with this organization. Non-executives (public utility) made the lowest submissive scores of all the groups tested; the mean and median for this group being -4.- and 8.5, in that order. According to this study, it would seem that the revised form of the "A-S Reaction Study" has some value as a selective device for parceling out those with sales and executive ability from the ranks of

TABLE I

A COMPARISON OF THE RANGE, MEAN, AND MEDIAN OF SCORES FOR THE "A-S REACTION STUDY" OBTAINED THROUGH THREE DIFFERENT INVESTIGATIONS

Study	N	Range	Mean	Median
Allport Orig.	727	64 to -55	-0.35	0.00
Beckman Rev.	350	49 to -51	1.4	1.00
Stevens (Beckman Rev.)	343	44 to -26	10.37	9.50

applicants for jobs requiring these abilities.

Stevens and Wonderlic (23) attempted a similar study to check the results obtained by Beckman. They gave his revised test to 201 persons applying for positions at the Household Finance Corporation, and to 141 branch managers. The mean and median for the applicants was 9.5 and 10.37. The obtained range was from 44 to -26. Table I compares the results of these three separate investigations. It appears that the study made by Stevens and Wonderlic is not in conformity with the results obtained by Allport and Beckman. The distribution of scores for the former is not at all normal, the mean and median being separated by nine points. Evidently, more experimentation must be conducted with Allport's original version of the test, and the

Beckman revision.

A similar study was attempted by Achilles and Schultz (1). The purpose was to discover the difference between newly hired life insurance salesmen and assistant managers in degree of ascendance. The Beckman revision was administered to 557 new agents and 62 assistant managers. Results showed that the new agents scored, on the whole, two points higher than the assistant managers. It was the conclusion of the authors that more work is needed in establishing new norms for this test so that it will eventually be of discriminatory value in selecting sales personnel.

The "A-S Reaction Study" has been used as a device for psychological appraisal, but not without realization of its limitations. Bender (7) attempted to relate the traits of ascendance and submission to other factors making up the personality. He obtained an r of +.03 between the A-S test and height, .09 was obtained with weight. These correlations cannot be regarded as statistically significant. Nor was any relationship which could be considered as statistically significant found between intelligence scores and academic standing and the A-S test. The only significant relationship discovered, an r of .379, was between Allport's test and Heidbreder's test of introversion-extroversion. Evidently, some factor exists which results in the correlation observed between "ascendancy-submission," and

"introversion-extroversion."

Allport (6) attempted to discover whether the trait of submission could be identified with the neurotic personality. A group of 197 male students received the Reaction Study, along with the Thurstone inventory, an instrument supposedly capable of measuring neurotic tendencies. The r between submission and neurotic tendency was found to be .347. Since eleven of the items appear on both tests, this figure is spuriously high. By dropping these items, the correlation figure was lowered to .254. Although there seems to be some relationship between submissiveness and neurotic tendencies, the authors point out that it is not a significant one. There were no statistics quoted to substantiate this claim.

Allport (4), in his manual of directions, mentions some of the uses which the test has had. Some of these are self-knowledge, vocational guidance, placement, and theoretical research in the area of personality traits. Allport points out that results obtained with the test should be interpreted with caution because of the low reliability and validity of the instrument. Results should be considered as suggestive, and not thought of as conclusive.

(3) Studies Similar in Design

The unity between the act of perceiving and those aspects of the personality which act as selective devices in

perceiving has been of concern to researchers during recent years. Research has revealed that there exists in the personality certain predispositions to either accept or reject favorable or unfavorable stimuli. The specific direction of these studies has been along two avenues. The first of these two courses has related to the estimate of spatial relationships among valued and non-valued stimulus objects, and is exemplified in the work of Lambert, Solomon and Watson (16), and Bruner and Postman (11). The second course, which is relevant to the present study, relates to the speed of perception of words which bear a particular relationship to a certain aspect of the personality.

Postman, Bruner, and McGinnies (21) undertook a study which attempted to show that personal values were determinants of what the individual selects perceptually from his environment. Using the Allport-Vernon classification of values as a guide, 36 words were chosen from a list of 96 words, which in the opinion of three judges, were most characteristic of a "value." These "values" were taken from Spranger's original classification designating six areas of value to which all men belong. They are: social, religious, theoretical, economic, aesthetic, and political. Thus, each of the six "value areas" was represented by six words. Each word contained six or seven letters, and was printed in capital letters and presented in random order to

subjects by means of a modified Dodge tachistiscope. Each word was presented three times at .01 second, and then again at .02 second, and so forth until recognition of the word was achieved. A complete record of all responses was kept, since it was felt that significant material might be revealed in prerecognition responses. The study used twenty-five subjects.

To gain a measure of each individual's value orientation, the Allport-Vernon "Study of Values" was administered either a month before, or a month after the tachistiscopic presentation. Thus, data was available which related to the speed of recognition of words representative of six values, all prerecognition responses along with the final correct responses, and a measure of each subject's value orientation as revealed by the Allport-Vernon test.

In order to compare the relationship between value rank on the Allport-Vernon test and recognition time, graphic profiles were constructed for each subject. Combining these individual profiles resulted in a "mean" profile which indicated that there was a positive relationship between adherence to a value system and speed of recognition of words related to that value system; i.e., "high value" words are perceived more readily than "low value" words. A Chi-Square test indicated that the relationship is statistically significant for the group as a whole, although individual differences were great.

These authors also found that pre-recognition responses seemed to conform to a certain pattern. These responses could be classified as follows: (1) "Covaluent" responses in which a word is called out which lies within the same value area; e.g., "Easter" for "sacred." (2) "Contravaluent" responses in which words are reported which are opposite in meaning from those presented; e.g., "scornful" for "helpful." (3) "Structural" responses in which guesses seemed to be based solely on the structural aspects of the presented word; e.g., "moving" for "loving." (4) "Nonsense" responses; e.g., "linone" for "income." (5) "Unrelated" responses which were not classifiable according to any of the previous categories.

Pre-solution responses were classified into three areas on the basis of the subject's value of orientation. These types are: (1) "Selective sensitivity," in which case there appears to be a lower threshold for high value words, (2) "perceptual defense," which occurs when stimuli are presented which are inconsistent or threatening to the individual's value system, (3) "value resonance," which is noted when stimulus words reflecting the subject's preferred value orientation is tapped. These words are recognized more quickly because they tend to be resonant with his major values.

It may be concluded from this study, that there does exist a relationship between the individual's hierarchy of

values and the speed of recognition of words associated with these values.

Postman and Schneiders (22) did a follow-up study along these same lines. Their purpose was to investigate the relation between personal values, word recognition, word frequency, and memory. As in the preceding study, a list of 36 words were devised, six for each of the Allport-Vernon areas. Words were controlled for frequency of usage by the Thorndike-Lorge "L" count. These words were then presented tachistiscopically to eighteen college students who had received the Allport-Vernon test. Care was taken to keep the subjects as naive as possible regarding the purpose of the experiment. Results showed that high frequency words--words which occur relatively frequently in daily speech--are recognized more quickly than low frequency words. The average duration time for high frequency words was .109 second, and for low frequency words, .118 second. It was also found that for the high frequency words there was no systematic relationship between value rank and the duration threshold of a word associated with a particular value rank. However, for low frequency words, duration thresholds did vary systematically with the value rank of the subject. In the case of these words, the higher the value for the subject, the lower the threshold became for words representing those values.

Thus, it would seem that word frequency is a definite

variable to be considered in experiments of this nature. They selected five words which were relatively common with respect to frequency, and five which were relatively uncommon. In this way, each of the Allport-Vernon value areas was represented by ten words. Using a version of the method of limits, the words were presented in random order to nineteen subjects. A tachistiscope was employed. Again, the Allport-Vernon test was utilized in order to ascertain the relative importance of a value area for subjects. Results indicated that when the mean recognition times were compared between the high and low frequency words for each value, there emerged a noticeable difference. Low frequency words tend to have a higher recognition time than high frequency words. There also seemed to be a tendency for higher valued words to depress mean recognition time among both frequent and infrequent words.

McClelland and Lieberman (19) conducted a study which related to the speed of visual recognition of need related words. To a group of 36 subjects, two tests of need-achievement were administered. These tests were only recently proved to be of merit with respect to need-achievement, and the reader should consult the article for more information concerning the tests.

Two judges selected a total of thirty words. These words were broken down into three categories of ten words each. The first ten were neutral with respect to motivational or need

content, the second ten were related to achievement, and the third connoted security. The subjects were then shown a series of five preliminary words, in order to determine the correct level of brightness for each subject. When this was determined, the amount of light intensity was reduced to a level which made recognition of words difficult. The intensity for the achievement and need related words, and also the neutral words, was then gradually increased until recognition took place at .01 second. The mean number of exposures required to see the critical word or words was then compared with the mean number of exposures required to see the neutral words. The difference between the two means was then divided by the standard deviation of the number of exposures required for the neutral words. In this way, it was possible to determine whether a subject saw a critical word faster or slower than a neutral word.

In general, results showed that those scoring high in need-achievement tended to perceive the need-related words more quickly than they did words not associated with a particular need. When the need-achievement was high, the time needed for recognition of characteristic words was brief, as compared to the situation which existed when need-achievement was low. It was also found that pre-recognition responses tended to follow the pattern reported by Postman, Bruner, and McGinnies.

Before this study was made there was no attempt to

control the words with regard to their familiarity. It was found upon subsequent study, however, that all the words were approximately in the same range of frequency, when using the Thorndike word count (24) as the criterion.

McGinnies and Bowles (18) in an effort to demonstrate the role of personal values in perception, presented twenty-four subjects with a series of photographs of prominent people, each of whom could be associated with one of the six Allport-Vernon value areas. Each value area was represented by two faces. Employing the tachistiscope, each face was presented to a subject in random order, and he was told what the occupation of the person was in terms of the Allport-Vernon value system; e.g., "this is a scientist," or, "this is a religious leader." Each face was presented for .01 second with an eight second interval between exposures. After the twelve faces had been exposed in this manner, the subjects were told that now they would have to identify the faces. When the subject made a correct identification in terms of the value-area for a face, he was informed of this. If the response was incorrect, the experimenter corrected the subject and the entire series was gone through again.

Before the tachistiscope presentations, each subject took the Allport-Vernon test.

For each subject, the rank-order correlation between the six value areas ranged from highest to lowest according to a

particular subject's test results, and the number of exposures necessary to recognize each pair of faces was calculated, along with the product-moment correlation between raw scores on the Allport-Vernon test and the number of trials needed for recognition of each pair of faces associated with the corresponding value. It was found that the distribution in both cases was not a normal one. Correlations for each individual were then changed into z-scores and Fisher's t-technique was applied to determine if mean correlations differed significantly from zero. The null hypothesis was rejected at the .02 level of confidence. It would appear, therefore, that there is a relationship between value orientation of a subject and the speed with which he recognizes individuals related to his value system. Analysis of variance revealed that there were significant differences between means.

McGinnies (17) undertook a study which attempted to determine whether perceptual defense would protect a subject from stimuli which are emotionally repugnant. Using sixteen subjects, he exposed eleven neutral words, and eleven critical words. Examples of the latter would be: "whore," "bitch," and "penis." These words were randomized with the neutral words and were exposed tachistiscopically at increasing time intervals until recognition was achieved. In an effort to determine if any emotional reaction was present before the words were recognized, the galvanic skin response for each subject was recorded.

It was found that emotionality was greater for the critical words, using the GSR as the criterion, than for the neutral words. The difference between the mean response times of critical words was significant at the .01 level of confidence, the critical words having a higher recognition threshold. It was concluded that emotionality is an accompaniment of perceptual defense, and that the latter is designed to delay the greater anxiety that accompanies actual recognition of the stimulus.

According to the results obtained by these investigators, it would seem that various elements in the personality are operating to influence the way in which certain stimuli are perceived. Most of these studies deal with the perception of words which connote certain personality characteristics. In some of the studies, both words and objects are used as stimuli, as in the case of the photographs. This was done in an effort to demonstrate that the same personality variables influence perception regardless of the form of the stimulus material.

According to the studies presented here, there seems to be general confirmation among writers concerning the importance of personality variables in influencing perception. The interest of the present author deals with two personality variables and the extent to which they effect the perception of words presented visually. The two traits are "ascendance" and "submission."

It was pointed out earlier, that the reliability and validity reported for the "A-S Reaction Study" is quite low. Validation was accomplished by means of ratings, and correlations range from +.30 to +.70. This range is probably due to differences in capacity among raters in assessing ascendance and submission. At any rate, however, ratings are poor criteria for test validation. They should only be resorted to when there are no other means of validation, and the norms established through ratings should certainly be viewed with caution. Therefore, any scores or groups of scores obtained on the "A-S Reaction Study" must be interpreted as being suggestive and not conclusive.

The reliability of the reaction study has varied according to different investigators. All report a figure between +.70 and +.80, however. With these severe limitations, it was found that only thirty of the total forty-one items of the Form for Men were of diagnostic value with respect to the traits under consideration.

The Reaction Study has been revised and used for business purposes, especially for the selection of executives and salesmen. Some of the other uses which the test has had are self-knowledge, vocational guidance, and theoretical research in psychology, education, and sociology.

The studies of Postman, Bruner, and McGinnies (21), McClelland and Lieberman (19), Postman and Schneiders (22),

and Howes and Soloman (14), all point to the fact that our perceptions are influenced by various personality factors, and that perception is consequently selective. Some have studied elements of the personality and related them to the speed of recognition of words presented visually. This approach has been criticized because of the neglect of the variable of word frequency in establishing experimental control.

McGinnies and Bowles (18) found a relationship between certain personality variables and the recognition of photographs associated with these variables, thus showing that the general proposition holds true no matter what the experimental stimulus material happens to be.

The exact relationship between perception and personality is still a moot question. Only through controlled experimentation of the type presented in this review, can we hope to ascertain the nature and form of this relationship.

CHAPTER III

DESIGN OF THE RESEARCH

The subjects for this study were male undergraduate students taking courses in psychology at Loyola University in Chicago, Illinois. Thirty-nine subjects were employed, the majority being between the ages of eighteen and twenty-five. The mean age for all participants was 20.9 years with a standard deviation of 2.7 years.

The initial phase of the procedure involved the acquisition of a series of words which bore both ascendant and submissive connotations. There are no standardized lists of such words available. This presented the first problem with which to be dealt, and its solution was effected by selecting sixty words from the Allport-Odbert list of trait names (5). These words were all adjectives and were divided into groups of thirty words each, one group being "ascendant" and the other "submissive." It was decided that five words in each category would be a sufficient number to present to the subjects. In a pilot study a longer series of words was used, and it was found that many subjects became fatigued or seemed to lose interest in the experiment.

In an effort to obtain a more objective measure of a

TABLE II

FREQUENCY, MEAN, AND STANDARD DEVIATION OF LETTERS FOR ASCENDANT AND SUBMISSIVE WORDS

ASCENDANT WORDS	Frequency of letters per word	SUBMISSIVE WORDS	Frequency of letters per word
COMMANDING	10	YIELDING	8
POWERFUL	8	SUBMISSIVE	10
ATTACKING	9	OBEYING	7
AGGRESSIVE	10	PASSIVE	7
EXERTING	8	BASHFUL	7
Total	45		39
Mean	9.0		7.8
S.D.	.89		1.16

word's "ascendant" or "submissive" quality, the words were presented to five judges in two separate columns. One column contained the "ascendant" words, while the other included the "submissive" words. Five students from the department of psychology rated these words. One of the raters was a graduate student. Instructions to judges, the method of rating, and the words used in the experiment are shown in Appendix A.

Only the words which had been given a majority rating

of one or two were considered in constructing the final list of ten words. Each word could be given one rating by each judge of from one through five. Here listed are the means and standard deviations of the numerical rating made by the judges for each of the ten ascendant and submissive words. The ascendant words had the following means and standard deviations: commanding, M 1.6- SD .48; powerful, M 2.0- SD 1.09; attacking, M 1.20- SD .26; aggressive, M 1.40- SD .48; exerting, M 2.0- SD .63, and the submissive words had the following means and standard deviations with respect to ratings: yielding, 1.4- SD .48; submissive, M 1.80- SD .74; obeying, M 2.0- SD .88; passive, M 2.40- SD 1.01; bashful, M 2.0- SD .63. Table II lists the five "ascendant" and the five "submissive" words together with the letter frequency for each word, the mean number of letters in each of the two groups, and the standard deviations for both series of words. It is clear by inspection that the difference between the mean of 9.0 for the "ascendant" words, and 7.89 for the "submissive" words is not statistically significant. Merely to check the accuracy of this assumption, a critical ratio was computed. The "t" test of significance between these uncorrelated means was found to be 1.50, and this was well below the requirement for significance at the five per cent level of confidence.

These words were then randomized by shuffling them after they had been printed in capital letters on ten individual

celluloid slides. Slides were used to facilitate tachistiscopic presentation, and the order in which the words were presented was according to the following: commanding, powerful, passive, bashful, submissive, aggressive, yielding, exerting, obeying, and attacking.

The next problem to be considered was that of intensity at which words were to be tachistiscopically presented. This seemed to be a crucial variable since "test" subjects were able to recognize a series of "neutral" words at the higher exposure speeds (1/100 sec) if the lamp intensity of the tachistiscope was high enough. Six preliminary test subjects were used to determine the most feasible degree of lamp brightness. To the six subjects these five neutral words were presented: legalize, pillars, intellect, therein, and instinct. All of the words were presented at a speed of 1/100 second, but with varying upward calibrated intensities of two degrees beginning at fifteen volts. The average intensity for the six subjects was 32.6. This was the point at which the group as a whole was able to recognize the words. Lamp intensity was finally fixed at twenty volts, for it was discovered that this was the proper amount of brightness minimally required for some recognition to take place at the exposure speed of 1/100 second. At this level of brightness, only subjects with exceptional visual acuity were capable of recognizing the words. This intensity was maintained, of course, for

the slower speeds of exposure as well.

With these main variables under control, it was possible to proceed with the experiment. It will be recalled, that the hypothesis states that persons who tend toward ascendance or submission should react most readily to words which are representative of the trait most characteristic of them. It is assumed that the more deeply these traits are imbedded in the personality, the more they will continuously affect the manner in which the individual reacts regardless of the situation or activity in which he may be engaged. Interest should center, then, around the person or group of persons who are located in the upper and lower ends of the ascendance-submission continuum. This point will be developed more fully in Chapter IV.

The degree of familiarity with the concept of ascendance and submission was broad, since naivté could be related to the number of courses completed in psychology. It was found, however, that when each subject was questioned with regard to what he thought the tests were about, he was only able to answer vaguely at best. The more sophisticated subjects conjectured that the test related somehow to ascendance and submission, but were unable to piece the motives of the study completely. One of four graduate students was eliminated from the study because of familiarity with the design and purpose of the study.

Each subject was seated six feet from a large Keystone

slide projection screen. To the subject's immediate left there stood a wooden barricade which concealed the projection tachistiscope. The experimental booth was lighted by means of an overhead flourescent lamp.

When a subject had been seated before the screen, he was given the following instructions:

> We want to see how quickly you are able to see words. You will be shown a series of words, and as soon as you see anything at all, call it out regardless of what it might be. Guessing is permissable.

After the area of the screen in which the word would appear was indicated, the subject was told that the experimenter would say "ready" before each flash.

Each of the words was then presented three times at 1/100 sec, and if the word was not recognized at that speed, it was presented three times at 1/50 sec. This procedure was followed for all of the succeeding time exposures; viz., 1/25 sec, 1/10 sec, and 1/2 sec. If a word was recognized at any of the above time intervals it was removed from the list, and the remaining words were presented until exact recognition occurred. A record was kept of the subject's pre-recognition responses in the hope that these would reveal certain patterns of pre-perception phenomena.

Immediately after this phase of the procedure had been completed, the Allport "A-S Reaction Study" was administered to each subject. The reaction study is designed to determine

whether an individual tends to dominate those about him, or be dominated by them. A number of life situations are verbally presented, and the subject is to choose among a number of alternatives that action which he would be most likely to follow. Each answer to a question has a positive, negative, or zero numerical weight. Consequently, the test is easily scored by totaling these values and subtracting the smaller score from the larger one. If the raw score is minus, the individual is said to be inclined in the direction of submission, if positive, he is said to be inclined in the direction of ascendance. The norms for the test are arranged in deciles. The range for the first decile is from a plus 84 to a plus 24, while the range for the tenth decile is from a minus 79 to a minus 25. For a more complete explanation of the norms (Form for Men), the reader is referred to Appendix II which contains a copy of the manual of instructions along with a copy of the test. The test can be administered in groups or individually. The individual procedure was employed in this study.

It was believed that giving this test after the presentation of the words would minimize the possibility of subjects guessing the nature of the experiment. Each subject was asked what he thought the experimenter was trying to ascertain. No one was able to accurately infer the aim of the study.

It should be recalled that the test materials used

for this study are far from being refined instruments. However, they are the best that could be found in attempting to verify the hypothesis under consideration.

CHAPTER IV

ANALYSIS OF RESULTS

The assumption which the present study makes is that ascendance and submission are relatively constant factors in personality, and as a consequence, are affecting the ways in which individuals perceive. It is further assumed that the more inclined an individual is toward one extreme or the other the more his reactions will conform to dominant or submissive behaviour. It was decided, therefore, to work with the data collected from those subjects falling in the first and fourth quarters of the distribution of the A-S Reaction Study scores obtained from the subjects used in this study.

The first and fourth quarters contained nine scores each. The range of scores in the first quarter was from minus 45 to minus 10, for the fourth quarter it was from plus 14 to plus 44. The average recognition times for each of the subjects on the ascendant and submissive words was determined. These can be seen by referring to Table III. Also included in this table are the mean recognition times for both submissive and ascendant groups for the ascendant and submissive words.

The ascendant group has a lower recognition time for

TABLE III

INDIVIDUAL AND GROUP MEAN REACTION TIMES FOR ASCENDANT AND SUBMISSIVE WORDS OF SUBJECTS FALLING IN FIRST AND FOURTH QUARTERS ON "A-S REACTION STUDY"

	HIGHS ON A-S n - 9		LOWS ON A-S n - 9	
	Asc. Words	Sub. Words	Asc. Words	Sub. Words
1.	.064	.020	.250	.400
2.	.065	.200	.370	.300
3.	.190	.130	.220	.254
4.	.112	.020	.064	.014
5.	.260	.180	.250	.158
6.	.300	.300	.420	.500
7.	.020	.018	.190	.220
8.	.112	.065	.112	.065
9.	.190	.250	.158	.112
Tot.	1.313	1.183	2.034	2.023
Mn.	.146	.131	.226	.225

both ascendant and submissive words when compared to the submissive group. An analysis of variance revealed that there was no significant difference between any of the four sets of means.

The F ratio was 1.60, considerably lower than that needed for significance at the .05 level of confidence.

A rank difference correlation between classification according to the A-S test and speed of recognition of ascendant and submissive words was accomplished in the following manner: Each word which had been exposed was assigned a range of numerical values independent of specific recognition time. Ascendant words were scored plus, and submissive words minus. If an ascendant word was recognized at 1/100 sec, it was assigned a value of plus five, since there were five exposure levels used in this operation. Therefore, each succeeding level of increased exposure time received a decreased numerical value on the five point scale. After all words had been scored according to this procedure, it was possible to determine whether the ascendant or the submissive words had been recognized more quickly. This was accomplished by algebraically adding the total of points received for ascendant and submissive words. If a plus score resulted, this meant that the ascendant words were recognized more quickly. The obtained range of scores for the eighteen subjects was from plus three to minus three. Since ranking negative numbers is a cumbersome procedure, all scores were converted to positive numbers by assigning the lowest negative number (3), in this case) a value of plus one, so that the range of scores now extended from plus one through plus seven. The same procedure was

followed with the raw scores obtained on the A-S test. The lowest score here was a minus 42, which after conversion became plus one. The highest raw score, a plus 43, became a plus 85. It should be noted that this method of handling the data did not alter any fundamental mathematical relationships which were present before conversion.

The obtained rank difference correlation was .32, indicating a slight positive relationship between ascendance-submission and rate of recognition between ascendant and submissive words. The standard error of Rho, however, was .218. This was considerably below the requirement for statistical significance at the .05 level of confidence.

The data was next subjected to a Chi Square analysis. A 2 x 2 contingency table revealed an X^2 of .240 for one degree of freedom. This figure indicates that the obtained distribution of frequencies could have occurred by chance alone at least 64 times out of a hundred. A Chi Square of 3.841 would have been required before the null hypothesis could be rejected at the .05 level, i.e., that the obtained distribution significantly departed from a random distribution. Consequently, the obtained differences in the distribution did not significantly deviate from the expected distributions but rose from the effects of random sampling.

It is apparent that the results obtained in this study

do not corroborate the findings of other investigators who worked with essentially the same variables; viz., personality factors and their effect on perception. According to this study, the relationship between the traits of ascendance and submission, and the recognition of ascendant and submissive words can be considered a chance affair. If this is true, two alternatives are possible. First, either the design of the experiment was faulty and therefore failed to confirm a hypothesis which is correct, or secondly, the hypothesis itself is incorrect and there actually is no relationship between the traits of ascendance and submission and speed of recognition.

The first alternative gains credence when we consider the state of refinement of the instruments used in this study. It should be recalled, that according to validity and reliability studies of the "A-S Reaction Study," this test is apparently a poor instrument for detecting the traits of ascendance and submission, as Allport (4) himself admits. Therefore, the question arises as to whether or not the population employed in this study possesses these traits to a degree great enough to be a factor in modifying perception.

Another methodological consideration which must be faced with respect to the present study concerns the time intervals used for tachistiscopic presentation of the stimuli. The instrument used had a time gap from 1/50 to 1/25 sec without the

intermediate 1/3 sec. Whether this shortcoming had any real bearing on the outcome of the study is not known, but in the research reported by Postman, Bruner, and McGinnies (21), it seems that this was a vital level of discrimination.

Word frequency is also undoubtedly an important variable. Before this study was undertaken, no attempt was made to control this factor. However, the words employed were checked with the Thorndike Lorge Word Count (24). It was discovered that for each ascendant word used, there was a submissive word with the same relative frequency of occurrance. For example, the ascendant word, "commanding" was found to occur about the same number of times in the word counts as the submissive word, "yielding." The former occurred in the second five hundred most frequently occurring words, while the latter occurred in the third five hundred most frequently occurring. "Attacking" and "obeying" both were found in the third five hundred, "exerting" and "passive" in the eighth thousand, and "aggressive" and "submissive" in the ninth thousand. "Powerful" and "bashful" were the most widely separated with regard to frequency of occurrance, "powerful" occurring in the last half of the third thousand, while "bashful" appeared in the last half of the fifth thousand. Word frequency has been an important variable in many of the experiments which have attempted to relate personality variables to perceptual recognition. Howes and Soloman (14) were the first to point this

out, and their arguments and evidence seems so convincing that earlier studies by Postman and Bruner must be subjected to severe criticism. However, the present investigation revealed that word frequency had no apparent effect on the recognition of words. The five ascendant words themselves were recognized at about the same average speed as the submissive words. This, of course, is verified by the closeness in average reaction times between the ascendant and submissive groups of words, Table III, page 32. It would seem, then, that in the present study, word frequency did not act as a crucial variable.

It is also questionable whether the words used for this study were actually of an ascendant or submissive quality. The limitations imposed by rating words according to prescribed categories are obvious, but in view of the fact that no standardized lists of ascendant and submissive words are available, the use of unstandardized material became mandatory.

No attempt was made to ascertain differences in visual acuity among subjects, although obviously gross visual disturbances were avoided. However, it may be that a more precise check of acuity would have revealed significant differences among the groups of subjects which may have obscured the effect of the independent variable under study.

Past research along the present lines has revealed in what would seem to be a quite conclusive manner that some re-

lationship does exist between motivational states and selective perception. The postulation of a personality "structure" which is "dynamic" in its operation and which continually acts to distort perception is popular in psychology today. Indeed, it is quite obvious that many personality-oriented investigators take it for granted that the perceptual system is no more than a tool in the hands of a reified "personality structure." By studying perception, it is assumed, we can gain a mirror image of this structure. Postman has termed this the "projective fallacy" and has severely criticized this stand recently (20). His criticism deserves close attention, since it amounts to a reversal of his earlier position.

Postman points out that under the influence of vaguely defined motivational concepts largely culled from psychoanalytic thinking, experimenters have been overly zealous in attempting to relate perceptual phenomena to emotional variables. It may be that these phenomena can be encompassed more parsimoniously by such learning principles as frequency, contiguity, recency, and effect. Citing the evidence gained from studies of the effect of word frequency on recognition time, Postman makes a strong argument against any simple projectionist viewpoint of perception. Although Postman does not deny that personality variables can modify perception, use of personality concepts should be forestalled until all other variables have been thoroughly

examined.

The present writer believes that the concept of personality structure as a dynamic system of needs and values which exerts a continuous influence on the individual's behavior is far too valuable to be discarded. Postman's criticisms, when examined closely, seem to be directed largely towards poor experimental designs and loose methodology. Certainly, this experimenter would readily agree with Postman on this point, since the present investigation has clearly shown the equivocality of results which necessarily springs from inadequate control of all pertinent variables. However, it is contended that the notion of personality as a variable in the modification of perception can still be retained, serving as a strong impetus to research.

Table III reveals that the mean recognition time for the ascendant group of subjects on both the ascendant and submissive words is .08 sec higher than that obtained by the submissive group. Although, as was pointed out before, this difference is not statistically significant, a trend does seem to be indicated which suggests an interpretation in line with personality theory as advocated by such projective test investigators as Klopfer (15).

It may be that ascendant individuals are more attentive to the environment and its stimuli in general. Ascendancy as a trait would be related to "extroversion" as indicated by a high

ratio of color responses to form responses on the Rorschach (15). Ascendancy would than exert a general influence on perception which would reveal itself in this tendency to be more attentive to the environment, rather than the more specific tendency to be attentive only to ascendant words. Submissive individuals, on the other hand, would be more withdrawn, possibly showing a greater number of Rorschach movement responses, and would be less attentive to environmental stimuli when compared to their ascendant peers.

CHAPTER V

SUMMARY AND CONCLUSIONS

Recent research in perception has emphasized the role of personality variables as selective mechanisms. It was the theory of traits as expressed by Allport, and the evidence presented by Postman, Bruner, McGinnies, and others concerning the influence of motivational factors on perception, which led to the present hypothesis; viz., that the traits of ascendance and submission are instrumental in determining the speed of recognition of ascendant and descendant words. It was assumed that these traits are highly functional, especially in individuals falling in the upper ranges of ascendance and submission.

The criteria for determining the presence of these two traits was Allport's "A-S Reaction Study," Form for Men. However, this test possesses limitations with respect to its validity and reliability; consequently, the results obtained from it must be interpreted with caution. Studies which deal with the Reaction Study all give warning of this fact, and suggest that it is to be utilized only with full awareness of its limitations.

Research regarding the influence of personality variables on perception has utilized a series of stimulus objects to

point up this interdependance. These have taken the form of valued and threatening objects such as coins, pictures, and insignias. A great majority of these studies have employed pertinent or "crucial" words as stimuli. A legion of criticism has followed this latter practice which questions the feasibility of using words with which the subject has probably had great contact with as a result of not only his inner "interests," or some other vaguely defined personality determinent, but also as a function of maximal association with similar categories of stimulus material. The point is that other factors must be accounted for which are known to operate between the "directive force" in the person and the percept linked to it.

This study utilized a male sample of thirty-nine college students. Each was presented with a series of ascendant and submissive words in random order and tachistiscopically exposed. Following this, Allport's "A-S Reaction Study" was individually administered. Only recognition time data for subjects falling in the upper and lower quarters of scores on the "A-S" test were used.

Three statistical procedures were applied to the data thus obtained. First, an analysis of variance between mean recognition times for ascendant and submissive words for both ascendant and submissive individuals revealed an F ratio of 1.60 which was not significant at the .05 level of confidence.

Second, a rank difference correlation between classification on the "A-S" test and speed of recognition of ascendant and submissive words. This was accomplished by means of a special scoring procedure which assigned a numerical value to each of the five exposure levels, and then relating these to "A-S" test scores. The obtained Rho was .32. The standard error of Rho, however, was .218. This was found to be lower than the requirement at the .05 level of confidence. Thirdly, a Chi Square analysis revealed that the obtained distribution with one degree of freedom would have occurred by chance sixty-four times out of one hundred and arose strictly by random sampling.

From the preceding, one of two conclusions can be drawn. Either the design of the experiment was such that the pertinent variables could not reveal themselves properly, or there is no actual direct relationship between ascendance and submission and the speed of recognition.

Limitations in design occurred because of the relative inadequacy of the instruments employed. No standardized set of ascendant and submissive words could be found, and consequently, ratings of words had to be made. Nor was any truly adequate test of ascendance and submission available. That the hypothesis was not verified does not preclude the fact that if more highly refined measures had been used, and more of the variables controlled, perhaps verification would have taken place. Postman

has recently stressed the urgency of a realistic appraisal of experimental methodology with regard to studies in the vein of the present undertaking. It is the belief of the present writer that despite the negative results of the present investigation, there is much to be said for a "personality structure" theory of perception, but it is pointedly realized that confirmation of such a theory can only come about through a crucial realignment of experimental approaches to the problem.

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APPENDIX I

WORD JUDGMENTS

INSTRUCTIONS TO JUDGES: Below are two columns of words. Th column at the left contains words which describe people who to be dominant in a situation or activity. The column at th right contains words which describe people who tend to be sul missive in a situation or activity. There are thirty words the DOMINANT column (Col. 1), and thirty words in the SUBMIS column (Col. 2). You are asked to rate words in both columns according to the following schedule:

Rate 1	if the word is			EXTREMELY DOMINANT	(Col. 1) or		SUBMISS	
(2).								
Rate 2	"	"	"	VERY	"	"	"	
Rate 3	"	"	"	FAIRLY	"	"	"	
Rate 4	"	"	"	HARDLY	"	"	"	
Rate 5	"	"	"	NOT AT ALL	"	"	"	

Put the number of your rating after each word judged. Be sur that you have all of the words judged in both columns.

Column 1 DOMINANT	Column 2 SUBMISSIVE
leading	following
AGGRESSIVE*	SUBMISSIVE*
active	PASSIVE*
domineering	secluded
exploring	reposed
authority	docile

*stimulus word

radical	conserving
changing	constant
exposing	concealing
fighting	restraining
COMMANDING*	OBEYING
POWERFUL*	weak
courageous	fearful
strength	feeble
willing	negative
achieving	failing
discussing	silent
predicting	writing
prayerful	hiding
adventurous	prayerful
discovering	gentle
haggling	self-conscious
EXERTING*	humble
energetic	inert
ATTACKING*	static
expansive	BASHFUL*
controlling	calm
busy	evasive
beating	doubting
battling	YIELDING*

APPENDIX II

(COPY OF "A-S REACTION STUDY")

NAME_____ SCORE_____

AGE_____ *Form for Men*

A–S REACTION STUDY

DIRECTIONS: Most of these situations will represent to you your own actual experiences. Reply to the questions spontaneously and truthfully by checking the answer which most nearly represents your usual reaction. If a situation has not been experienced, endeavor to feel yourself into it and respond on the basis of what you believe your reaction would be. If the situation seems totally unreal or impossible to respond to, you may omit it.

1. In witnessing a game of football or baseball in a crowd, have you intentionally made remarks (witty, encouraging, disparaging, or otherwise) which were clearly audible to those around you?

   frequently_____

   occasionally_____

   never_____

2. a) At a reception or tea do you seek to meet the important person present?

   usually_____

   occasionally_____

   never_____

   b) Do you feel reluctant to meet him?

   yes, usually_____

   sometimes_____

   no_____

3. At church, a lecture, or an entertainment, if you arrive after the program has commenced and find that there are people standing, but also that there are front seats available which might be secured without "piggishness" or discourtesy, but with considerable conspicuousness, do you take the seats?

   _____habitually

NAME_____ SCORE_____

AGE_____ *Form for Men*

A–S REACTION STUDY

DIRECTIONS: Most of these situations will represent to you your own actual experiences. Reply to the questions spontaneously and truthfully by checking the answer which most nearly represents your usual reaction. If a situation has not been experienced, endeavor to feel yourself into it and respond on the basis of what you believe your reaction would be. If the situation seems totally unreal or impossible to respond to, you may omit it.

1. In witnessing a game of football or baseball in a crowd, have you intentionally made remarks (witty, encouraging, disparaging, or otherwise) which were clearly audible to those around you?

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   never_____

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   never_____

   b) Do you feel reluctant to meet him?

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   sometimes_____

   no_____

3. At church, a lecture, or an entertainment, if you arrive after the program has commenced and find that there are people standing, but also that there are front seats available which might be secured without "piggishness" or discourtesy, but with considerable conspicuousness, do you take the seats?

   habitually_____

   occasionally_____

   never_____

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4. A salesman takes manifest trouble to show you a quantity of merchandise; you are not entirely suited; do you find it difficult to say "No"?

yes, as a rule_____

sometimes_____

no_____

5. a) Have you solicited funds for a cause in which you are interested?

yes_____

no_____

b) Do you feel reluctant to do such soliciting?

yes_____

no_____

6. a) A professor or lecturer asks any one in the audience, say of 20 or more people, to volunteer an idea to start discussion. You have what appears to be a good idea, do you speak out?

habitually_____

occasionally_____

rarely_____

never_____

b) Do you feel self-conscious when you speak under such circumstances?

very_____

moderately_____

not at all_____

7. You have heard indirectly that an acquaintance has been spreading rumors about you which, though not likely to be serious in consequence, are nevertheless unjustified and distinctly uncomplimentary. The acquaintance is an equal of yours in every way. Do you usually

"have it out" with the person_____

let it pass without any feeling_____

take revenge indirectly_____

feel disturbed but let it pass_____

8. Some one tries to push ahead of you in line. You have been waiting for some time, and can't wait much longer. Suppose the intruder is the same sex as yourself, do you usually

remonstrate with the intruder_____

"look daggers" at the intruder or make clearly audible comments to your neighbor_____

decide not to wait, and go away_____

do nothing_____

9. Do you feel self-conscious in the presence of superiors in the academic or business world?

markedly_____

somewhat_____

not at all_____

10. Some possession of yours is being worked upon at a repair shop. You call for it at the time appointed, but the repair man informs you that he has "only just begun work on it." Is your customary reaction

to upbraid him_____

to express dissatisfaction mildly_____

to smother your feelings entirely_____

11. After a very tiring day you decide to keep your seat in a crowded street-car even though ladies have to stand. You overhear one of the ladies refer to the situation in some remark to her companion. Do you

rise and offer your seat_____

remain in your seat feeling ill at ease_____

remain in your seat without embarrassment_____

12. You are at a mixed party where about half the people are friends of yours. The affair becomes very dull, and something should be done to enliven it. You have an idea. Do you usually

take the initiative in carrying it out_____

pass it on to another to put into execution_____

say nothing about it_____

13. When you are served a tough steak, a piece of unripe melon, or any other inferior dish at a high class restaurant, do you complain about it to the waiter?

occasionally_____
seldom_____
never_____

14. Have you crossed the street to avoid meeting some person?

frequently_____
occasionally_____
never_____

15. Have you haggled over prices with tradesmen or junk men?

frequently_____
occasionally_____
never_____

16. In tennis or any similar competition when you are pitted against some one considerably superior to you in this particular ability, are you as a rule

determined to win in spite of his advantage_____
not especially hopeful, but unwilling to concede defeat at the start_____
inclined to admit to yourself defeat at the outset, hoping only to make a presentable score_____

17. You desire to board a boat or train to see a friend off, or to enter an exhibition or park; the guard forbids you on what seem to be entirely unnecessary technicalities, do you argue with him and bluff your way past?

habitually_____
occasionally_____
never_____

18. When you were 10 or 12 years of age were you the "goat" for your playmates? (e.g., in playing war would they force you to fight on the unpopular side?)

usually, yes_____
occasionally_____
never_____

19. Suppose you have recently become a salesman and are trying to sell life insurance to a middle-aged financier of great note. He says, "Young man, I don't know how long you have been in this game, but you will never succeed unless you acquire more experience and confidence in yourself." What will be your reaction?

to persist in the attempt to sell insurance_____
to agree and seek further advice from him_____
to become emotionally disturbed in your reply, — angry, embarrassed, or condescending_____
simply to take leave_____

20. You are with a group of people in the woods, and although not certain of the path, you probably know as much about it as anyone present. Do you take responsibility of guiding the group?

take the full responsibility_____
make suggestions or agree to share the responsibility_____
let another take the lead according to his judgment_____

21. a) If you feel a person is dictatorial and domineering, do you as a rule make it a point to avoid him?

yes_____
no_____

b) If unavoidably thrown with him at a gathering, do you feel annoyed?

yes_____
no_____

c) Do you usually

try to treat him the same way he treats you_____

behave normally, but wish either you or he had not come_____

feel and behave normally_____

22. a) When you see some one in a public place or crowd whom you think you have met or known, do you inquire of him whether you have met before?

sometimes_____

rarely_____

never_____

b) Are you embarrassed if you have greeted a stranger whom you have mistaken for an acquaintance?

very much_____

somewhat_____

not at all_____

23. a) Have you ever been made to feel antagonistic or irritated on account of the "bossy" way a chairman conducts a meeting?

frequently_____

occasionally_____

never_____

b) Do you take the initiative in opposing such a person?

usually_____

sometimes_____

never_____

24. If a student in class discussion makes a statement that you think erroneous, do you question it?

usually_____

occasionally_____

never_____

25. If you hold an opinion the reverse of that which the lecturer has expressed in class, do you usually volunteer your opinion

in class_____

after class_____

not at all_____

26. When an accident occurs where many people are present besides yourself do you usually

take an active part in assisting_____

take the part of a spectator_____

leave the scene at once_____

27. When a book-agent or insurance salesman comes to your home or to your room, do you as a rule find it difficult to refuse to listen to him, or to get rid of him as soon as the purpose of his visit becomes clear?

quite difficult_____

moderately difficult_____

not at all difficult_____

28. When the clerk in a store where you have been waiting for some time for service overlooks you and waits on a customer who has come into the store after you, do you as a rule

call his attention to the fact_____

wait silently, though perhaps with an injured air_____

go out to another store_____

29. Have you ever felt that a professor talks too much in class and should give you more chance to express your views and conclude points?

frequently_____

occasionally_____

never_____

30. a) Have you largely on your own initiative in the past five years organized clubs, teams, or other such groups?

more than three_____

one to three_____

none_____

b) Have you within the past five years been recognized as leader (president, captain, chairman) of groups?

more than six_____

one to six_____

none_____

31. In conversing with a person older than yourself whom you respect, on an issue about which you disagree, do you characteristically

maintain your views in argument_____

conciliate your opponent by seeming to agree with him, and yet try indirectly to carry your point_____

agree with him, at least verbally, and let it go at that_____

32. You are dining with a young lady whom you are trying to impress. The waiter presents a bill which is slightly larger than you expected it to be. Do you verify the bill before paying it?

openly_____

surreptitiously_____

not at all_____

33. A friend with whom you are not particularly intimate has a racquet, skates, skis, or some similar article which you would like very much to borrow for an afternoon. Do you feel a hesitation in asking for it?

usually_____

sometimes_____

rarely_____